

## REMARKS

The amendment is presented to correct formal deficiencies in the claims and more carefully define the claims. More specifically, Claim 1 was amended to more particularly define the invention in accordance with applicant's comments as set forth in the previous amendment, namely, that the invention is directed to an electrocatalyst comprising a ruthenium sulfide supported on an electrically conductive support. Additionally, Claims 19 and 45 were amended to correct formal and typographical errors in the claims and improve the syntax thereof.

No new matter is sought to be entered and applicant's remarks from the previous amendments are incorporated herein by reference.

In the Office Action the Examiner withdrew the claim rejections raised under Sections 112(1) and 112(2). Notwithstanding, the Examiner raised new grounds of rejection.

First, the Examiner rejected Claims 7, 9 and 45 under 35 U.S.C. § 112, second paragraph, as being indefinite. With respect to Claims 7 and 19, the Examiner indicated that the claims were unclear in that a "ternary sulfide" contains three metals and sulfur, yet Claims 7 and 19 recite only two metals. In response, applicant respectfully submits that the definition of a ternary compound is a compound comprised of **three elements**, not three metals. Here, a ternary sulfide is a compound comprised of sulfur plus two elements just as a ternary oxide is an oxide of two elements, etc.

As for the objections to Claims 19, this claim was incorrectly retyped from the previously presented Claim 19, with the current amendments bringing the claim back to

its previous form. Applicant regrets any inconvenience caused by the typographical error and suggests that the claim is now in proper form under § 112, second paragraph.

With respect to Claim 45, this claim was also mistyped from that previously presented, notably referring to cathode when reference should have been made to electrode. The revised claim corrects the claim and improves the syntax, obviating the objection under § 112, second paragraph as well as the objection under 37 C.F.R. 1.75(c).

Turning to the substantive matters raised, the Examiner rejected claims 1, 5, 7, 8, 11, 14-19, 47 and 48 as anticipated by or, in the alternative, as obvious over Breyse et al. The Examiner also rejected Claims 1, 5, 7, 8, 11, 16-18, 47 and 48 as unpatentable over Raybaud et al and Claims 1-3, 5 and 6 as unpatentable over Dubeck et al. In response to applicant's previous remarks, the Examiner noted that while applicants argue that the claimed invention is directed to an electrocatalyst, the claim does not recite this.

In keeping, Claim 1 has been amended to recite that the invention is directed to an **electrocatalyst** comprising a ruthenium sulfide supported on an **electrically conductive** support.

The Examiner's assumption that "refractory oxides are considered to read upon the limitation conductive support", at p. 10 of the Office Action is surprising since refractory oxides are classic examples of non-conductive substances. Notwithstanding, the present amendments to Claim 1 make the claim clearer and distinguish the claim from the cited art.

Finally, the Examiner found that Claims 9, 10, 12, 13, 20-22, 36-44 and 46 would be allowable if written in independent form, including all of the limitations of the base claim and any intervening claims. In light of the present amendment to Claim 1,

however, which have been considered by the Examiner as set forth in the Response to Arguments section of the Office Action, applicants believe that all of the pending claims are now allowable.

Based on the foregoing, favorable consideration and early allowance of all pending claims is respectfully requested and earnestly solicited.

Respectfully submitted,  
Hedman and Costigan

A handwritten signature in black ink, appearing to be 'K. Elorek', written over a horizontal line.

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